

ABSTRACT OF THE DISCLOSURE

A grab picks up a hollow workpiece and displaces it to a machining station where, while the workpiece is held in the grab, a tool is engaged from outside with a first surface of the workpiece to finish the first surface. Then the workpiece is reoriented by the grab and engaged by a tool with a second surface of the workpiece to finish the second surface. Another tool is fitted through a large-diameter hole of the workpiece and positioned inside the workpiece adjacent a small-diameter hole and a drive spindle is coupled through the small-diameter hole to the other tool to machine an inner surface of the workpiece adjacent the small-diameter hole. These steps are then repeated to finish another interior surface of the workpiece adjacent another small-diameter hole. Finally the workpiece is displaced from the machining station and released from the grab.